

Product datasheet for **RG214814**

ARS2 (SRRT) (NM_015908) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ARS2 (SRRT) (NM_015908) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | SRRT |
| Synonyms: | ARS2; ASR2; serrate |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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**ORF Nucleotide
Sequence:**

>RG214814 representing NM_015908
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTGACAGTGATGACGAGTACGATCGAAGGCGCAGGGACAAGTTCAGAAGAGAGCGCAGCGACTACG
 ACCGTTCCCGCGAGAGAGATGAAAGACGTCGAGGGGACGATTGGAATGACAGAGAGTGGACCGTGCCG
 TGAGCGCCGTAGTCGGGGTGAATATCGGGACTATGACCGGAATCGGCGAGAGCGCTTCTCGCCACCTCGC
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 GTGGCTATGAGATGCCCTATGCTGGGGGGTGGGGGCCAACTTATGGCCCCCTCAGCCCTGGGGCCA
 CCCTGACGTCCACATCATGCAGCACCATGTCCTGCCTATCCAGGCCAGGCTGGGCAGCATTGCAGAGATT
 GACCTGGGTGTCGCGCCCGCTGATGAAGACCTCAAGGAGTTTCTCCTCTCCCTGGATGACTCGGTGG
 ATGAGACGGAGGCGCTAAGCGCTATAATGACTACAAGCTGGATTTCCGGAGGCAACAGATGCAGGATTT
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 GGCCAGGAGGTTATCCTGGAAACCTCGCAACAGGATGGTTCGTGGAGACCCAAGGGCCATTGTGGAAT
 ATCGGGACCTGGATGCCCGACGATGTTGATTTCTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214814 representing NM_015908
 Red=Cloning site Green=Tags(s)

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MGDSDD EYDRRRRDKFRERSDYDRSREDRERRGGDDWNDREWDRGRERRSRGEYRDYDRNRRERFSPPR
HELSPQKRMRRDWEHSSDPYHSGYEMPYAGGGGGPTYGPPQPWGHDPVHIMQHHLVLP IQARLGSIAEI
DLGVPPPVMKTFKEFLSLDSDVDETEAVKRYNDYKLD FRRQQMQDFFLAHKDEEWFRRSKYHPDEVGKRR
QEARGALQNRLRVFLSLMETGWFDNLLLDIDKADAIVKMLDAAVIKMEGGTENDLRILEQEEEEEQAGKP
GEP SKKEEGRAGAGLGDGERKTNDKDEKKEDGKQAE NDSNDDKTKKSEG DGDKEEKEDSEKEAKKSSK
KRNRKHS GDDSFDEGSVSESESESESGQAEEEEKEEAEALKEKEKPKEEWEKPKDAAGLECKPRPLHKT
CSLFMRNIAPNISRAEII SLCKRYPGFMRValsepqperrfrrgwvtfdrsvNIKEICWNLQNIRLREC
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GQGGYPGKPRNRMVRGDPRAIVEYRDL DAPDDVDF
  
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TRTRPLE - GFP Tag - V

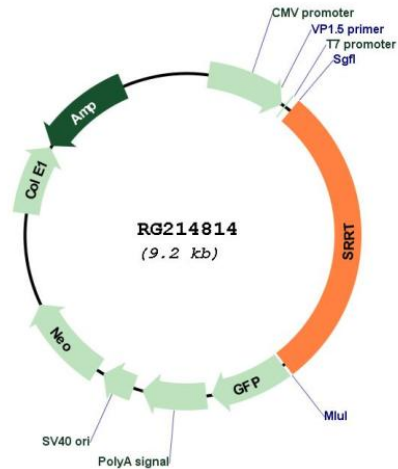
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_015908

ORF Size: 2628 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_015908.6](#)

RefSeq Size: 2994 bp

RefSeq ORF: 2631 bp

Locus ID: 51593

UniProt ID: [Q9BXP5](#)

Cytogenetics: 7q22.1

Gene Summary: Acts as a mediator between the cap-binding complex (CBC) and the primary microRNAs (miRNAs) processing machinery during cell proliferation. Contributes to the stability and delivery of capped primary miRNA transcripts to the primary miRNA processing complex containing DGCR8 and DROSHA, thereby playing a role in RNA-mediated gene silencing (RNAi) by miRNAs. Binds capped RNAs (m7GpppG-capped RNA); however interaction is probably mediated via its interaction with NCBP1/CBP80 component of the CBC complex. Involved in cell cycle progression at S phase. Does not directly confer arsenite resistance but rather modulates arsenic sensitivity. Independently of its activity on miRNAs, necessary and sufficient to promote neural stem cell self-renewal. Does so by directly binding SOX2 promoter and positively regulating its transcription (By similarity).[UniProtKB/Swiss-Prot Function]